

ABSTRACT OF THE DISCLOSURE

In some embodiments, a storage medium comprises application software that performs one or more operations and that directly facilitates the conversion of a virtual memory address to a physical memory address. The application software comprises instructions that initialize an application data structure (e.g., an object or array) usable by the application software to facilitate the conversion of memory addresses and also comprises instructions that store pointers to the virtual memory addresses to be converted. In other embodiments, a system comprising a secure and non-secure memory subsystem is disclosed. Before execution of an application stored in the secure sub-system, a list of pointers to parameters contained in virtual memory is created. The virtual memory addresses referenced by the pointers in the list are converted to pointers to physical memory addresses before execution of the application.